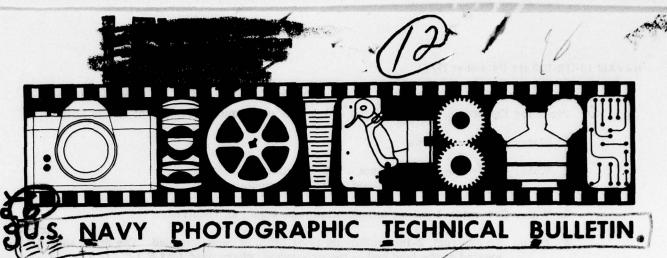
AD-A057 056

NAVAL AIR SYSTEMS COMMAND WASHINGTON D C
U.S. NAVY PHOTOGRAPHIC TECHNICAL BULLETIN.(U)
DEC 77

NAVAIR-10-1TB-100

NL

END
ANTE
SEND
A

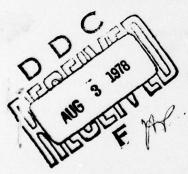


Published by the Naval Photographic Center under direction of the Commander Naval Air Systems Command

Commanding Officers are requested to insure that these bulletins are distributed promptly to all photo personnel.

NAVAIR 18-1TB-180

Photographic Technical Bulletins are primarily for the information and education of all personnel directly concerned with Naval Photography. Included are: information on installation, operation, modification, and maintenance of photographic equipment; engineering data sheets; news items pertaining to current photographic and procurement data, new products, etc.; and, other timely information regarding photography as it applies to the Navy. The contents in many cases will form a source of information for examination for advancement in rating, and may be used as the basis for examination questions. Navy personnel are urged to submit material for future bulletins and/or inquiries regarding Photographic Technical Bulletins to the Commander, Naval Air Systems Command, AIR-562, Washington, D.C. 20361.



INSTALLATION INSTRUCTIONS KRE-MATIC COLOR PRINT PROCESSOR MODEL CPT-16-EK2-65

- I. INTRODUCTION. This bulletin covers the installation of the KRE-MATIC Color Print Processor, Model CPT-16-EK2-65, aboard ship and at shore-based stations. This color print processor is manufactured by Kreonite, Inc., 715 E. 10th Street, Wichita, Kansas 67201. Pre-installation and unpacking procedures are included in this bulletin to facilitate installation procedures. Procedures are included for both thru-the-wall installation and darkroom installation. Note that either gravity-feed or pumpfeed may be used for operation of the replenishment tanks.
- II. PRE-INSTALLATION REQUIREMENTS. Prepare installation site prior to delivery, including utilities and construction. Customer-furnished equipment and tools should include:
 - A. Double-backed tape
 - B. Trim molding

This document has been approved for public release and sale; its distribution is unlimited.

247 100

Jon

15 DECEMBER 1977

- C. Plumbing Equipment. Specifications and details for plumbing equipment are as follows:
 - 1. Water pressure 50 psi
 - 2. Water supply temperature hot 125 $^{\circ}$ F minimum cold 80 $^{\circ}$ F maximum
 - 3. Water flow rate: 1 gallon/minute minimum, adjust as required.
 - 4. Drain: An external, 2-inch minimum floor drain is recommended. The drain should be located at the feed end of the processor, where practical.
 - 5. 1 1/2-inch drain hose
 - 6. 1/2-inch hot and cold water lines, with shut-off valves, to optional water control panels.
 - 7. Water filters
 - 8. 1/2-inch tempered water hose
 - 9. Flat bottom sink
- D. Electrical Requirements. Electrical requirements are as follows:

115 VAC, 60 Hz, 1 Ø, 20.2 amperes

110 - 126 V operating range

Two wires plus one earthground

Note

If the actual nominal system voltage of the available power source is not within the operating range of the processor, a boost or buck transformer may be required as follows:

NOMINAL	PROCESSOR	BOOST
SYSTEM	NAMEPLATE	OR
VOLTAGE	VOLTAGE	BUCK
100	115	BOOST
104	115	BOOST
110	115	BOOST
127	115	BUCK

- E. Electrical Equipment. Electrical equipment includes the following:
 - 1. Main electrical power disconnect box
 - 2. External power supply cable from main power disconnect to power junction box
 - 3. Electrical power line from replenishment wall cabinet to power junction box
 - 4. Electrical power line from optional water control panel to power junction box

F. Recommended Tools and Equipment. The following tools and equipment are recommended:

Screwdriver
7/16-inch socket wrench
1/2-inch socket wrench
Adjustable wrench
Allen wrenches
Silicone rubber seal
Process thermometer

- G. Processor Dimensions and Weight. Refer to Figure 1 for processor dimensions. Processor weight is approximately 350 pounds when filled with chemicals.
- H. Recommended Minimum Floor Space. Allow 36 inches (91 cm.) in front and 30 inches (76 cm.) in back of processor for operating room, with a total of 42 inches (107 cm.) on each side for servicing.
- I. Venting Requirement. Where there is a "thru-the-wall" installation, the darkroom should be vented by forcing air into the darkroom and allowing air to exit via the processor's feed slot.
- III. RECEIVING INSPECTION. Immediately upon receipt of the processor, inspect crate(s) and exterior of the processor for any possible damage. If possible, inspect in the presence of the FREIGHT CARRIER. Once the processor has been removed from the crate, inspect for any hidden damage inside and out. If damage is apparent, file claim with the CARRIER as soon as possible. Claims filed later than 15 days after the processor delivery may be refused by the carrier.

IV. UNPACKING PROCEDURES. Proceed as follows:

- A. Note the label on the side of the crates which reads, "REMOVE SCREWS."
- B. Remove all screws along bottom of remaining four sides. Remove all three sides and top as one piece.
- C. Remove plastic covering stapled to the shipping pallet.
- D. Remove all loose items from the shipping pallet and the processor's dryer catch basket.
- E. Remove white hold-down straps
- F. Remove entire crating containing water control panel (shipped separate from processor).

V. PREPARATION OF PROCESSOR FOR INSTALLATION.

- A. Panel Removals. Remove the following:
 - 1. Top cover and side access panels. Lift side panels "Up" and "Out."
 - 2. White hold-down straps across transports.
 - 3. Loose items on front and inside processor (feed table, replenishment cabinet, etc.).
 - 4. Shipping brace beneath dryer transport and shipping brace between dryer/chemical section of processor.

- B. Feed Table Assembly. Proceed as follows:
 - 1. Attach the feed table assembly over the four mounting screws located on processor front panel. Allow table assembly to hang firmly from processor.
 - 2. Connect the six-pin white connector from the sensing switch harness to the white six-pin receptacle on the left hand side of the processor panel.
- C. Transports Removals. Remove the transports from the tanks as follows:
 - 1. Remove developer entrance guide (pull "Back", then "Up").

CAUTION

Remove carefully. Guide ends may interfere with upper edge of feed slot.

- 2. Remove processor guides and dryer heat baffle.
- 3. Remove transport end plate clips (clips hold transports together). Apply small amount of pressure against side of clip, and lift up.
- 4. Remove drive shaft retainer.
- 5. Lift transports from tanks. Check for dirt or foreign material.
- D. Leveling Legs. Proceed as follows:
 - Remove shipping bolt and plastic inserts from each leg of processor, using a 7/16-inch socket wrench.
 - 2. Slide one leg of processor off edge of shipping pallet at a time. Insert leveling leg (shipped loose) into the processor leg. Screw each leveling leg completely into the processor leg, using an adjustable wrench or a 1/2-inch socket wrench.

VI. INSTALLATION OF PROCESSOR.

- A. Positioning Processor.
 - Darkroom installation. Position the processor stand in the darkroom as per the recommended floor space mentioned in paragraph II H. Refer also to Figure 2. Level the processor stand and secure it to the deck to prevent slippage of the processor stand. Place processor on the processor stand.
 - Thru-the wall installation. Place the processor on the processor stand and postion as shown in Figures 2, 3, and 4. Level the processor stand and secure to the deck to prevent slippage of the processor stand.

CAUTION

Two or more persons are required to lift the processor.

- B. Transport Re-installation. Re-install all transports, crossovers, and guides into the original positions. Check the following:
 - 1. All roller shafts and clips are in place.

- 2. All guides, gears, sprockets, endplates, etc. for any visible damage.
- 3. Transport chains for proper tension and routing.
- 4. All rollers rotate properly.

6

- 5. Tighten, but do not overtighten any loose screws.
- 6. For dirt or foreign material in tanks.
- 7. Any drain blockage by rinsing tanks with warm water with tank drain valves open.
- C. Transport Alignment. Proceed as follows:
 - 1. Determine that all transports are seated properly. Check transport alignment by sighting along top of transports.
 - 2. Determine that the drive sprocket on each transport is properly aligned with the drive chain. To adjust drive sprockets, loosen the allen screw on each sprocket, adjust and then re-tighten.
 - 3. Install dryer baffle between dryer and final rinse transports.

CAUTION

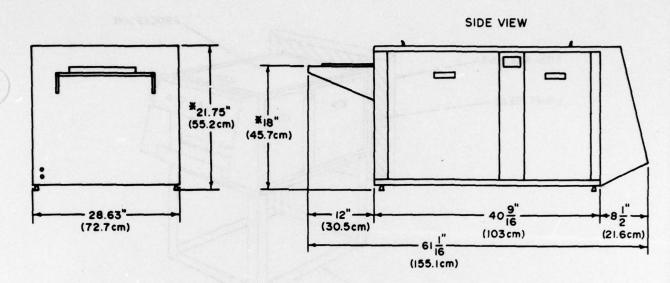
Weight of tranports must rest on tanks; not on drive gears.

- D. Drive Chain Tension. Check the tension of the drive chain to be sure it is taut. To adjust chain tension, loosen nut on inside of tension idler and pull taut. Re-tighten the nut. If the drive chain is not sufficiently taut, remove one or more links from the chain.
- E. External Power Connection. Have a qualified electrician install the receptacle and cover plate provided with the processor.
- F. Replenishment System. The replenishment system consists of the replenishment cabinet and replenishment bottles. The replenishment cabinet must be mounted at a height of 60 inches, measured from the deck to the bottom of the cabinet. The replenishment bottles must be mounted at a height of 70 inches from the deck. If it is not possible to mount the replenishment bottles at that height, it will be necessary to use Model BRS-20 bellows pumps, which are available from the manufacturer.
- G. External Hose Connection (see Figure 5). Flush out all lines prior to connecting to processor. Dirt in the lines is a major cause of plumbing component malfunction. Proceed as follows:
 - Connect the 3/8-inch hoses between the flowmeter panel and the bulkhead fittings on processor panel. Tighten hose clamps.
 - 2. Connect the 3/8-inch hoses between the bottom fitting on the flowmeter panel and the chemical storage bottles. Tighten hose clamps.
 - a. Make certain that all hoses are connected to their respective fittings and flowmeters. (From the Developer storage bottle to the Developer flowmeter, to the Developer bulkhead fitting on the front panel of processor).

- 3. When mounting the flowmeter panel, assure that:
 - a. Minimum height of flowmeter panel measured at base of panel is 60 inches.
 - b. The operator's view of the flowmeter is not obstructed.
 - c. Leave enough slack in the hoses so that flowmeter panel can be easily removed from wall, in order to make hose fittings easily accessible.
- 4. Connect the 1/2-inch hose from the water control panel to water fitting on processor front panel.
- H. Processor Leveling. With the tank drain valves closed, fill all the tanks with water. Adjust the processor leveling legs until the water surface is even across the 1-inch solid entrance roller in each tank.

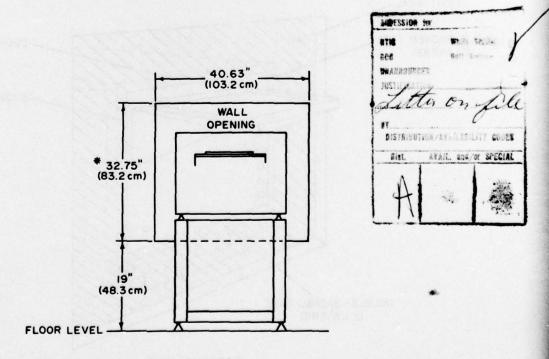
VII. REFERENCE MANUAL. Refer to operator's manual for pre-operational checkout and operating instructions.

R. L. SKILLEN
PHOTOGRAPHIC MANAGEMENT OFFICER
By Direction of the Commander
Naval Air Systems Command



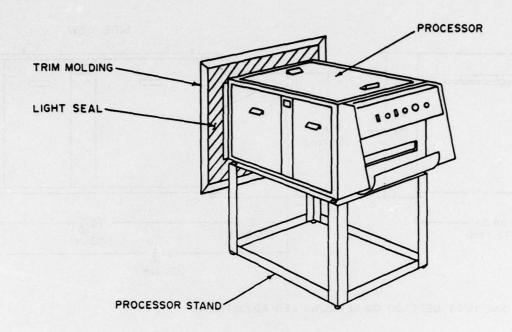
*+ DIMENSION DEPENDS ON LEVELING LEG ADJUSTMENT.

FIGURE 1. PROCESSOR DIMENSIONS



*IF AN OPTIONAL "ROOM - LIGHT FEED SYSTEM" (IGRLFS) IS USED, THIS DIMENSION MUST BE 35 INCHES (88.9 cm) TO PERMIT FOLDING THE HOOD BACK.

FIGURE 2. WALL OPENING DIMENSIONS



LIGHTSIDE VIEW

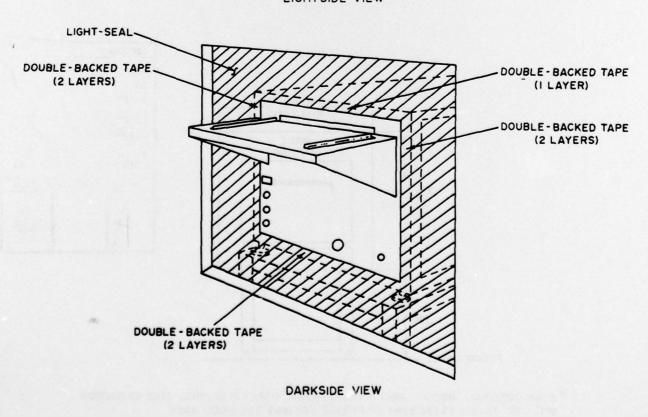


FIGURE 3. "THRU-THE-WALL" LIGHT-SEAL INSTALLATION

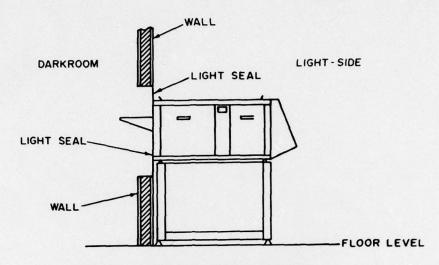
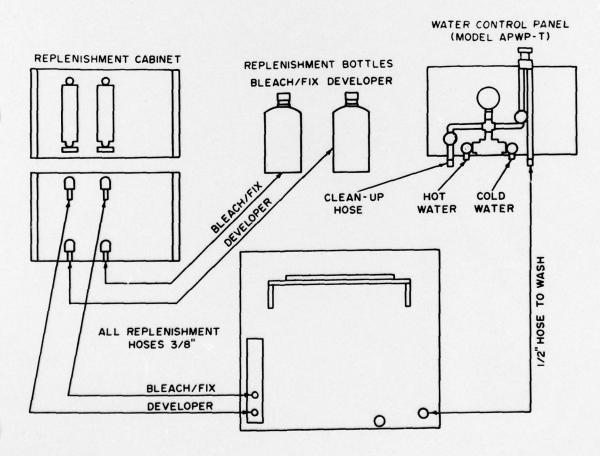


FIGURE 4. PROCESSOR POSITIONING (SIDE VIEW)



NOTE: COMPLY WITH ALL LOCAL PLUMBING CODES.

FIGURE 5. EXTERNAL HOSE CONNECTIONS